

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/050147

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC7: F16F 7/104, F16F 9/19, F16F 9/44, F16F 15/02**  
 According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

**IPC7: F16F**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

**SE,DK,FI,NO classes as above**

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**EPO-INTERNAL, WPI DATA, PAJ**

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6443273 B1 (LEDBETTER ET AL), 3 Sept 2002 (03.09.2002), column 3, line 58 - column 6, line 6; column 6, line 45 - line 67, figures 1-4	1-3,6-11
Y	--	4,5
X	US 5984233 A (SNYDER, JR. ET AL), 16 November 1999 (16.11.1999), column 3, line 57 - column 4, line 24, figures 3-5	1-3,6-11
Y	--	4,5
Y	US 6454063 B1 (OSTERBERG ET AL), 24 Sept 2002 (24.09.2002), column 3, line 16 - line 32, figure 2	4,5
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 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

3 February 2005

Date of mailing of the international search report

07-02-2005

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB 468365 A (AUGUSTE LOUIS MARIE ANTOINE ROUY), 30 June 1937 (30.06.1937), page 2, line 84 - line 103, figure 2  --	4,5
X	EP 1060932 A2 (VOLKSWAGEN AKTIENGESELLSCHAFT), 20 December 2000 (20.12.2000), column 2, line 42 - column 3, line 34, figures 1-4  --	10,11
A	EP 0214825 A2 (FORD MOTOR COMPANY LIMITED), 18 March 1987 (18.03.1987), figure 7, abstract  -- -----	1

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